Quiz 1
Business Mathematics

31^{st} January 2006

Time: 1 hours (10–11pm)

1. Let

$$A = \begin{pmatrix} 3 & 1 & 1 \\ 2 & 4 & 2 \\ 1 & 1 & 3 \end{pmatrix}$$

Find all the eigenvalues and a basis for each eigenspace. If possible, find invertible matrices P such that $P^{-1}AP$ is diagonal.

Bibliography

Seymour Lipschutz. *Theory and problems of Linear Algebra.* Schaum's Outline Series, McGraw-Hill, 1987(1968x)